Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

MECHANICS.

66. Proposed by B. F. FINKEL, A. M., M.Sc., Professor of Mathematics and Physics, Drury College. Springfield, Mo.

A conical stick of timber, length a, radius of base r, and density δ, is depressed, apex downward, in a liquid, density δ', so that the base is just level with the liquid. If left free to rise, required the greatest altitude to which it will ascend.

67. Proposed by G. B. M. ZERR, A. M., Ph. D., President and Professor of Mathematics, The Russell College, Lebanon, Va.

Find the horizontal and vertical components of the moon's "disturbing force" for any point on the earth's surface making an angle φ with the line joining the center of the earth to the center of the moon.

*** Solutions of these problems should be sent to B. F. Finkel, not later than June 10.

AVERAGE AND PROBABILITY.

63. Proposed by COL. CLARKE.

Three points are taken at random, one on each of the three faces of a tetrahedron; what is the chance that a plane passing through them cuts the fourth edge?

[From *Williamson's Integral Calculus*, page 410.]

64. Proposed by Rev. W. A. WHITWORTH, A. M.

O is a given point within a triangle; P is a random point within the same. The line through O and P is produced so as to divide the triangle into a trapezium and a triangle. Find the average area of this triangle. [From the *Educational Times*, London, Eng.]

*** Solutions of these problems should be sent to B. F. Finkel, not later than June 10.

BOOKS AND PERIODICALS.

Theoretical and Practical Graphics. By Frederick N. Willson, C. E., A. M., Professor in the School of Science, Princeton University. (Author's Edition) 1897. 4to. Pages viii + 264 + Appendix.

This is a most attractive work, not only conquering graphics entire, but containing much more of highest geometric interest, including a fairly complete course on higher plane curves.

The part of the subject where Church so long held supremacy in America with his Descriptive Geometry justly appreciated for its elegance, is paralleled by Professor Willson in his Chapter I and Chapters IX—XII, 117 pages in all, including 219 figures in the text, where he not only covers with equal conciseness and elegance the matter of Church's 138 pages of text and 21 pages of illustrations (102 figures), but in addition has treated many new and important matters, such as the Conoid of Pluecker (articles 333, 356, 477) a favor-